

WE CLAIM:

1. A medical device configured to be capable of dispensing a medium as part of a medical procedure, the device comprising:
 - 5 at least one injector ram adapted to be capable of operably engaging at least one syringe operably engaged with the medical device, the at least one syringe configured to be capable of containing the medium, the at least one injector ram configured to be capable of performing at least one dispensing function;
 - a controller device configured to be capable of actuating the at least one
10 injector ram relative to the at least one syringe;
 - a user interface in communication with the controller device and configured to be capable of receiving a user input from a user of the medical device;
 - a storage device configured to be in communication with the controller device, the storage device further configured to be capable of receiving the user input from
15 the user interface and selectively storing the user input such that the at least one dispensing function may be performed in response to the user input.
2. A medical device according to Claim 1, wherein the user interface
20 further comprises a display and wherein the controller device is further configured to be capable of displaying a graphic on the display.
3. A medical device according to Claim 1, wherein the at least one injector ram is configured to be capable of performing at least one dispensing function selected from the group consisting of:
 - 25 extending the at least one injector ram fully into the at least one syringe so as to initialize the at least one syringe prior to filling the at least one syringe with the media;
 - extending the at least one injector ram into the at least one syringe so as to dispense the media from the at least one syringe; and
 - 30 retracting the at least one injector ram from the at least one syringe so as to fill the at least one syringe with the media.

4. A medical device according to Claim 1, wherein the storage device comprises a non-volatile data storage medium.

5 5. A medical device according to Claim 2, wherein the display is further configured to be capable of displaying data from a data set corresponding to the at least one dispensing function.

6. A medical device according to Claim 2, wherein the storage device is
10 further configured to be capable of storing a plurality of display formats and wherein the display is further configured to be capable of displaying data in the plurality of display formats.

7. A medical device according to Claim 2, wherein the storage device is
15 further configured to be capable of storing a plurality of different languages and wherein the display is further configured to be capable of displaying data in the plurality of different languages.

8. A medical device according to Claim 1, wherein the controller device
20 comprises a computer device configured to be capable of running a computer program product capable of controlling the at least one dispensing function.

9. A method for controlling a dispensing device adapted to be capable of
dispensing of contrast media as part of a medical imaging procedure, the method
25 comprising:

receiving a user input from a user interface in communication with the dispensing device; and

directing the dispensing device to perform at least one dispensing function in
response to the user input such that the dispensing device is capable of independently
30 performing the at least one dispensing function in response to a single user input.

10. A method according to Claim 9, further comprising storing the user input in a memory device in communication with the user interface.

5 11. A method according to Claim 9, further comprising updating the user interface in response to the at least one dispensing function.

12. A method according to Claim 11, wherein the updating step further comprises displaying data from a data set selected from the group consisting of:
an elapsed time from a start of the at least one dispensing function;
10 a dispensing pressure exerted by the dispensing device; and
an update graphic for conveying the status of the at least one dispensing function.

13. A method according to Claim 9, wherein the receiving step further
15 comprises receiving the user input from a remote control device adapted to be capable of communicating with the dispensing device.

14. A method according to Claim 9, wherein the receiving step further comprises receiving a user input wherein the user input is selected from the group
20 consisting of:
an initialization command to extend at least one injector ram into a syringe operably engaged with the dispensing device;
a fill command to retract at least one injector ram from a syringe operably engaged with the dispensing device;
25 a dispense command to extend at least one injector ram into a syringe operably engaged with the dispensing device at a predetermined flow rate;
a selection of a language of a text graphic adapted to be displayed by the user interface;
a selection of the predetermined flow rate corresponding to the dispense
30 command; and
a start command to commence a dispensing operation.

15. A method according to Claim 9, wherein the at least one dispensing function is selected from the group consisting of:

extending at least one injector ram into at least one syringe operably engaged with the dispensing device;

5 retracting at least one injector ram from at the least one syringe operably engaged with the dispensing device;

filling the at least one syringe with contrast media;

filling the at least one syringe with flushing media;

10 displaying a text graphic on the user interface, wherein the text graphic is adapted to be capable of conveying a data set to a user of the dispensing device; and
displaying an elapsed time counter graphic, wherein the elapsed time counter graphic is adapted to be capable of updating in real time.

16. A computer program product capable of controlling a dispensing
15 device configured to be capable of dispensing a contrast media as part of a medical imaging procedure and a user interface adapted to be capable of communicating with the dispensing device the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

20 an executable portion for receiving a user input from a user interface in communication with the dispensing device; and

an executable portion for directing the dispensing device to perform at least one dispensing function in response to the user input such that the dispensing device is capable of independently performing the at least one dispensing function in
25 response to a single user input.

17. A computer program product according to Claim 16, further comprising an executable portion for storing the user input in a memory device in communication with the user interface.

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18. A computer program product according to Claim 16, further comprising an executable portion for updating the user interface in response to the at least one dispensing function.

5 19. A computer program product according to Claim 18, wherein the executable portion for updating further comprises an executable portion for displaying a data set, wherein data within the data set are selected from the group consisting of:

- an elapsed time;
- a dispensing pressure exerted by the dispensing device
- 10 a volume of contrast media contained within a first syringe operably engaged with the dispensing device;
- a volume of flushing media contained within a second syringe operably engaged with the dispensing device; and
- an update graphic for conveying the status of the at least one dispensing
- 15 function.

20. A computer program product according to Claim 16, wherein the executable portion for receiving further comprises an executable portion for receiving the user input from a remote control device adapted to be capable of communicating

20 with the dispensing device.

21. A computer program product according to Claim 16, wherein the executable portion for receiving further comprises an executable portion for receiving a user input wherein the user input is selected from the group consisting of:

- 25 an initialization command to extend at least one injector ram into a syringe operably engaged with the dispensing device;
- a fill command to retract at least one injector ram from a syringe operably engaged with the dispensing device;
- a dispense command to extend at least one injector ram into a syringe operably
- 30 engaged with the dispensing device at a predetermined flow rate;
- a selection of a language of a text graphic adapted to be displayed by the user interface;

a selection of the predetermined flow rate corresponding to the dispense command; and

a start command to commence a dispensing operation.

5 22. A computer program product according to Claim 16, wherein the executable portion for directing further comprises an executable portion selected from the group consisting of:

an executable portion for extending at least one injector ram into at least one syringe operably engaged with the dispensing device;

10 an executable portion for retracting at least one injector ram from the at least one syringe operably engaged with the dispensing device;

an executable portion for filling the at least one syringe with contrast media;

an executable portion for filling the at least one syringe with flushing media;

an executable portion for displaying a text graphic on the user interface,

15 wherein the text graphic is adapted to be capable of conveying a data set to a user of the dispensing device; and

an executable portion for displaying an elapsed time counter graphic, wherein the elapsed time counter graphic is adapted to be capable of updating in real time.

20 23. A computer-readable storage medium comprising computer-readable program code portions stored therein, the computer-readable program code portions comprising:

an executable portion for receiving a user input from a user interface in communication with the dispensing device; and

25 an executable portion for directing the dispensing device to perform at least one dispensing function in response to the user input such that the dispensing device is capable of independently performing the at least one dispensing function in response to a single user input.

30 24. A computer-readable storage medium according to Claim 23, further comprising an executable portion for storing the user input in a memory device in communication with the user interface.

25. A computer-readable storage medium according to Claim 23, further comprising an executable portion for updating the user interface in response to the at least one dispensing function.

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